

Date: Wednesday, 18/06/2008 1:26:43 PM  
 \*User: Julie Lecocq

## Process Sheet

|                                    |   |                           |                  |
|------------------------------------|---|---------------------------|------------------|
| <b>Customer</b> :                  | CU-DAR001 Dart Helicopters Services             | <b>Drawing Name</b> :     | BRACKET ASSEMBLY |
| <b>Job Number</b> :                | 39921   |                           |                  |
| <b>Estimate Number</b> :           | 10278   |                           |                  |
| <b>P.O. Number</b> :               |   | <b>Part Number</b> :      | D3121141         |
| <b>This Issue</b> :                | 18/06/2008                                      | <b>S.O. No.</b> :         |                  |
| <b>Prsht Rev.</b> :                | NC  | <b>Drawing Number</b> :   | D3121 REV E      |
| <b>First Issue</b> :               | //  | <b>Project Number</b> :   | N/A              |
| <b>Previous Run</b> :              | 39013   | <b>Drawing Revision</b> : | E                |
|                                    | <b>Type</b> :                                   | <b>Material</b> :         |                  |
|                                    | MACHINED PARTS                                  | <b>Due Date</b> :         | 11/07/2008       |
| <b>Written By</b> :                |   | <b>Qty:</b>               | 30               |
| <b>Checked &amp; Approved By</b> : | JULIO 08.06.18                                  | <b>Um:</b>                | Each             |
| <b>Comment</b> :                   | Est Rev: Pick: A 04.02.18 New issue KJ/DS       |                           |                  |
|                                    | Est Rev: B ECN 1060 07-11-12 DD verified by: EC |                           |                  |

## Additional Product

Job Number:



| Seq. #: | Machine Or Operation: | Description : |
|---------|-----------------------|---------------|
|---------|-----------------------|---------------|

|     |                 |             |
|-----|-----------------|-------------|
| 1.0 | M174B1000X02000 | 17-4 SS Bar |
|-----|-----------------|-------------|



**Comment:** Qty.: 0.5775 f(s)/Unit Total : 17.3250 f(s)  
 Material: 17-4 SS Bar per AMS 5604/5643  
 (M17-4-B1.000x02.000)  
 Identify for D3121-111  
 Batch: M107956

28 08/07/09 30

|     |          |          |
|-----|----------|----------|
| 2.0 | BAND SAW | BAND SAW |
|-----|----------|----------|



**Comment:** BAND SAW  
 Cut blanks: (1.000" x 2.000") 6.600" long

28 08/07/09 30

|     |       |                                |
|-----|-------|--------------------------------|
| 3.0 | HAAS1 | HAAS CNC VERTICAL MACHINING #1 |
|-----|-------|--------------------------------|



**Comment:** HAAS CNC VERTICAL MACHINING #1

1-Machine D3121-111 as per Folio FA361 and Dwg D3121 Identify as D3121-111

2-Deburr

3-Scribe batch number

DIP 08/07/21

30

|     |     |  |
|-----|-----|--|
| 4.0 | QC2 | INSPECT PARTS AS THEY COME OFF MACHINE |
|-----|-----|--|



**Comment:** INSPECT PARTS AS THEY COME OFF MACHINE

DIP 08/07/21

30

**Dart Aerospace Ltd**

| W/O: |      | WORK ORDER CHANGES |    |      |     |                                     |                          |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE   | By | Date | Qty | Approval<br>Chief Eng /<br>Prod Mgr | Approval<br>QC Inspector |
|      |      |                    |    |      |     |                                     |                          |
|      |      |                    |    |      |     |                                     |                          |

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

| NCR: |      | WORK ORDER NON-CONFORMANCE (NCR) |                             |                                 |                |                           |                       |                          |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC<br>Section A   | Corrective Action Section B |                                 |                | Verification<br>Section C | Approval<br>Chief Eng | Approval<br>QC Inspector |
|      |      |                                  | Initial<br>Chief Eng        | Action Description<br>Chief Eng | Sign &<br>Date |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |

**NOTE:** Date & initial all entries

Date: Wednesday, 18/06/2008 1:26:43 PM  
User: Julie Lecocq

## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: BRACKET ASSEMBLY

Job Number: 39921

Part Number: D3121141

Job Number:



Seq. #:

Machine Or Operation:

Description :

5.0

QC8

SECOND CHECK



Comment: SECOND CHECK

*ML 08/07/25*

*(30)*

6.0

D312121

Bolt



Comment: Qty.: 1.0000 Each(s)/Unit Total : 30.0000 Each(s)

Pick:

Qty Part Number

Description Batch

1 D3121-21

Bolt

*B40156*

*EF 08/08/06*

7.0

D3121241

Bearing Assembly



Comment: Qty.: 1.0000 Each(s)/Unit Total : 30.0000 Each(s)

Pick:

Qty Part Number

Description Batch

1 D3121-241 Bearing Ass

~~B40352~~

*B40352*

*EF 08/08/06*

8.0

SMALL FAB 1

SMALL & MEDIUM FAB RESOURCE 1



Comment: SMALL & MEDIUM FAB RESOURCE 1  
Assemble D3121-141 as per Dwg D3121.

*EF 08/08/06*

*(30)*

9.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

*S 08/08/06*

*counter*

*(x30)*

10.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location:

*A233*

*EC 08/06*

*(30)*

11.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

*AD 08/06/08*

*(30)*

Job Completion



*W 08-08-06*

| W/O: |      | WORK ORDER CHANGES |    |      |     |                                     |                          |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE   | By | Date | Qty | Approval<br>Chief Eng /<br>Prod Mgr | Approval<br>QC Inspector |
|      |      |                    |    |      |     |                                     |                          |
|      |      |                    |    |      |     |                                     |                          |

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

| NCR: |      | WORK ORDER NON-CONFORMANCE (NCR) |                             |                                 |                |                           |                       |                          |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC<br>Section A   | Corrective Action Section B |                                 |                | Verification<br>Section C | Approval<br>Chief Eng | Approval<br>QC Inspector |
|      |      |                                  | Initial<br>Chief Eng        | Action Description<br>Chief Eng | Sign &<br>Date |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |

**NOTE:** Date & initial all entries

|                              |               |                               |
|------------------------------|---------------|-------------------------------|
| <b>DART AEROSPACE LTD</b>    |               | <b>Work Order:</b> 39921      |
| <b>Description:</b> Bracket  |               | <b>Part Number:</b> D3121-111 |
| <b>Inspection Dwg:</b> D3121 | <b>Rev:</b> E | <b>Page 1 of 1</b>            |

### FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article ☐ Prototype

| Drawing Dimension | Tolerance     | Actual Dimension | Accept | Reject | Method of Inspection | Comments |
|-------------------|---------------|------------------|--------|--------|----------------------|----------|
| Ø0.392            | +0.002/-0.000 | 0.393            | ✓      |        |                      |          |
| 0.75              | +/-0.030      | 0.750            | ✓      |        |                      |          |
| 0.375             | +/-0.010      | 0.375            | ✓      |        |                      |          |
| 2.14              | +/-0.030      | 2.140            | ✓      |        |                      |          |
| 1.96              | +/-0.030      | 1.965            | ✓      |        |                      |          |
| 0.280             | +/-0.010      | 0.281            | ✓      |        |                      |          |
| 3.330             | +/-0.010      | 3.330            | ✓      |        |                      |          |
| 3.630             | +/-0.010      | 3.630            |        |        |                      |          |
| R0.25             | +/-0.030      | 0.250            | ✓      |        |                      |          |
| R0.375            | +/-0.010      | 0.375            | ✓      |        |                      |          |
| Ø0.201            | +0.005/-0.001 | 0.200            | ✓      |        |                      |          |
| 0.100             | +/-0.010      | 0.100            | ✓      |        |                      |          |
| 4.580             | +/-0.010      | 4.580            | ✓      |        |                      |          |
| 6.18              | +/-0.030      | 6.182            | ✓      |        |                      |          |
| 5.89              | +/-0.030      | 5.8895           | ✓      |        |                      |          |
| 0.080             | +/-0.010      | 0.075            | ✓      |        |                      |          |
| 0.300             | +/-0.010      | 0.300            |        |        |                      |          |
| 30°               | +/-0.1°       | 30°              | ✓      |        |                      |          |
| R0.25             | +/-0.030      | 0.25             | ✓      |        |                      |          |
| 0.130             | +/-0.010      | 0.128            | ✓      |        |                      |          |
| 0.664             | +/-0.010      | 0.664            | ✓      |        |                      |          |
| 0.381             | +/-0.010      | 0.383            | ✓      |        |                      |          |
| 0.201             | +/-0.010      | 0.203            | ✓      |        |                      |          |
| 0.400             | +/-0.010      | 0.401            | ✓      |        |                      |          |
| 0.580             | +/-0.010      | 0.585            | ✓      |        |                      |          |
| 100°              | +/-0.1°       | 100°             | ✓      |        |                      |          |
| 0.032             | +0.000/-0.010 | 0.029            | ✓      |        |                      |          |

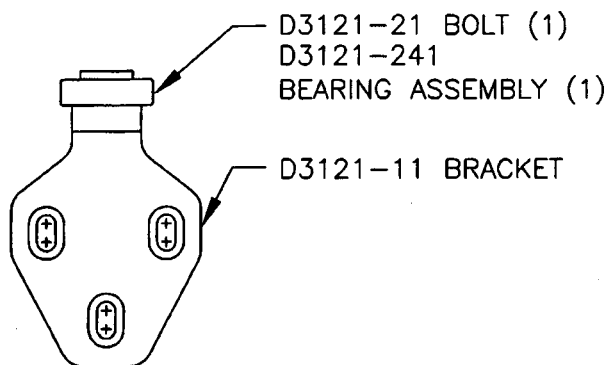
|                         |                        |                            |     |
|-------------------------|------------------------|----------------------------|-----|
| <b>Measured by:</b> JDP | <b>Audited by:</b> JML | <b>Prototype Approval:</b> | N/A |
| <b>Date:</b> 08/07/21   | <b>Date:</b> 08/07/25  | <b>Date:</b>               | N/A |

| Rev | Date     | Change  | Revised by | Approved |
|-----|----------|---|------------|----------|
| A   | 04.01.12 | New Issue P/O D3121-141                         | KJ/RF      |          |
| B   | 04.05.05 | Dimensions changed/re-arranged per Dwg revision | KJ/JLM     |          |
| C   | 06.06.14 | Dwg Rev. updated                                | KJ/JLM     |          |
| D   | 08.01.16 | Dimensions updated per Dwg Rev. E               | KJ/EC/DD   |          |
| E   | 08.05.28 | Tolerance revised for Ø0.201 dimension          | KJ/DD      |          |

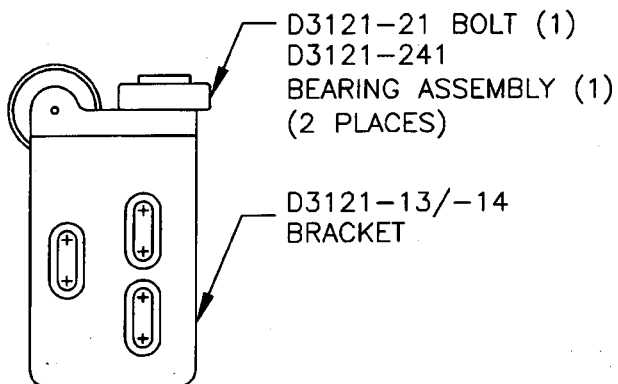


|                  |                |   |                         |
|------------------|----------------|---|-------------------------|
| DESIGN<br>#      | DRAWN BY<br>LE | DART AEROSPACE LTD<br>HAWKESBURY, ONTARIO, CANADA                   |                         |
| CHECKED<br>#     | APPROVED<br>#  | DRAWING NO.<br>D3121  | REV. E<br>SHEET 1 OF 10 |
| DATE<br>07.11.07 |                | TITLE<br>BRACKET ASSEMBLY   | SCALE<br>1:2            |
| A                | 02.04.15       | NEW ISSUE   |                         |
| B                | 03.01.16       | ADD RIDGES; ADD MAT'L PROP; FIX P/N<br>ADD -141/-143/-144/-145/-146 |                         |
| C                | 04.02.17       | ADD CLEARANCE; USE -241 BEARING                                     |                         |
| D                | 06.05.17       | D3121-25 CAP WAS 1.024, NOW 1.000                                   |                         |
| E                | 07.11.07       | ADD TOLERANCE TO 0.032 (DETAIL B)                                   |                         |

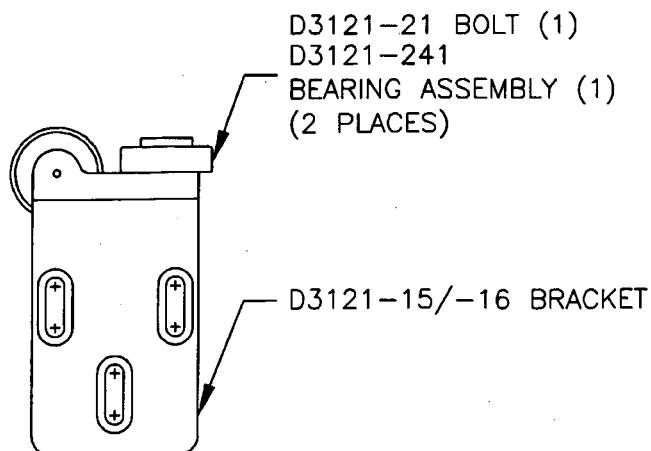
RELEASED  
07.11.07



**D3121-041 BRACKET ASSEMBLY**  
(REPLACES PREMIER P/N B30-23000-33)



**D3121-043 (SHOWN) / D3121-044 (OPPOSITE) BRACKET ASSEMBLY**  
(REPLACES PREMIER P/N B30-23000-37/-38)



**D3121-045 (SHOWN) / D3121-046 (OPPOSITE) BRACKET ASSEMBLY**  
(REPLACES PREMIER P/N B30-23000-35/-36)

SHOP COPY  
RETURN TO  
ENGINEERING  
UNCONTROLLED COPY  
SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
WORK ORDER  
NO. 39921

Copyright © 2002 by DART AEROSPACE LTD

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.

**DART**

|                  |                           |   |                         |
|------------------|---------------------------|---|-------------------------|
| DESIGN<br>#      | DRAWN BY<br>LE            | DART AEROSPACE LTD<br>HAWKESBURY, ONTARIO, CANADA |                         |
| CHECKED<br>#     | APPROVED<br>#             | DRAWING NO.<br>D3121                              | REV. E<br>SHEET 2 OF 10 |
| DATE<br>07.11.07 | TITLE<br>BRACKET ASSEMBLY |   | SCALE<br>1:2            |

D3121-21 BOLT (1)  
D3121-241  
BEARING ASSEMBLY (1)

D3121-111 BRACKET

**D3121-141 BRACKET ASSEMBLY**  
(REPLACES PREMIER P/N B30-23001-01)

RELEASED  
07.11.07

D3121-21 BOLT (1)  
D3121-241 BEARING ASSEMBLY (1)  
(2 PLACES)

D3121-113/-114 BRACKET

**D3121-143 (SHOWN) / D3121-144 (OPPOSITE)**  
**BRACKET ASSEMBLY**  
(REPLACES PREMIER P/N B30-23000-03/-04)

D3121-21 BOLT (1)  
D3121-241 BEARING ASSEMBLY (1)  
(2 PLACES)

D3121-115/-116  
BRACKET

**D3121-145 (SHOWN) / D3121-146 (OPPOSITE)**  
**BRACKET ASSEMBLY**  
(REPLACES PREMIER P/N B30-23000-05/-06)

SHOP COPY  
RETURN TO  
ENGINEERING  
UNCONTROLLED COPY  
SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
WORK ORDER  
NO. 39921

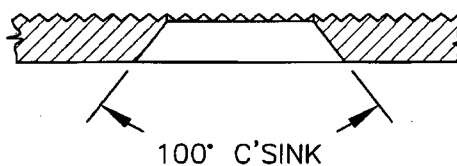
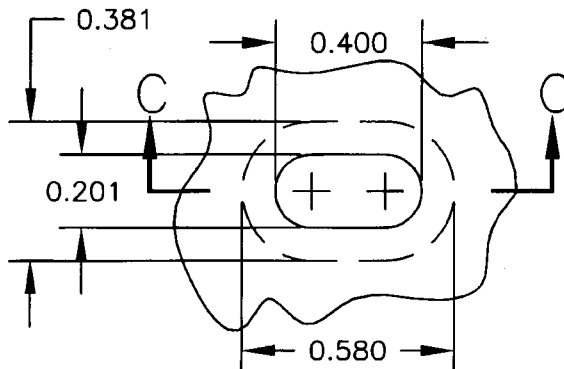
Copyright © 2002 by DART AEROSPACE LTD

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.



|                  |                |   |                         |
|------------------|----------------|---|-------------------------|
| DESIGN<br>#      | DRAWN BY<br>LE | DART AEROSPACE LTD<br>HAWKESBURY, ONTARIO, CANADA |                         |
| CHECKED<br>#     | APPROVED<br>#  | DRAWING NO.<br>D3121                              | REV. E<br>SHEET 3 OF 10 |
| DATE<br>07.11.07 |                | TITLE<br>BRACKET ASSEMBLY                         | SCALE<br>1:1            |

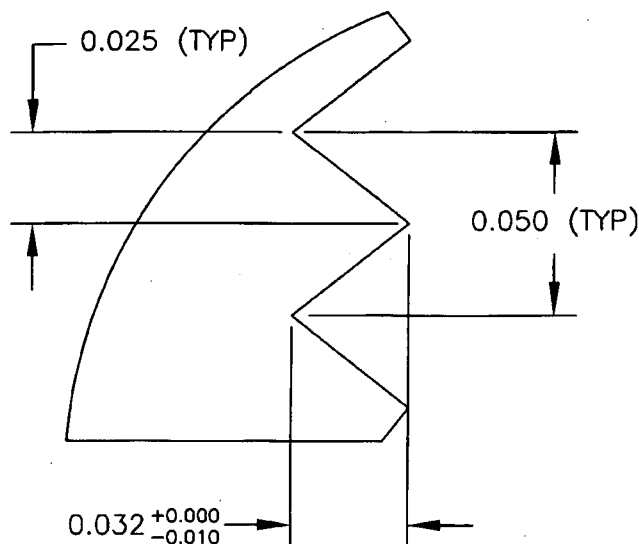
**DETAIL A:**  
**SLOT DETAIL**  
SCALE 2:1  
VIEW ROTATED



**SECTION**  
**C-C**

**RELEASED**  
07.11.07

**DETAIL B:**  
**RIDGE DETAIL**  
PARTIAL SECTION  
SCALE 1:20



SHOP COPY  
RETURN TO  
ENGINEERING  
UNCONTROLLED COPY  
SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
WORK ORDER  
NO. 39921

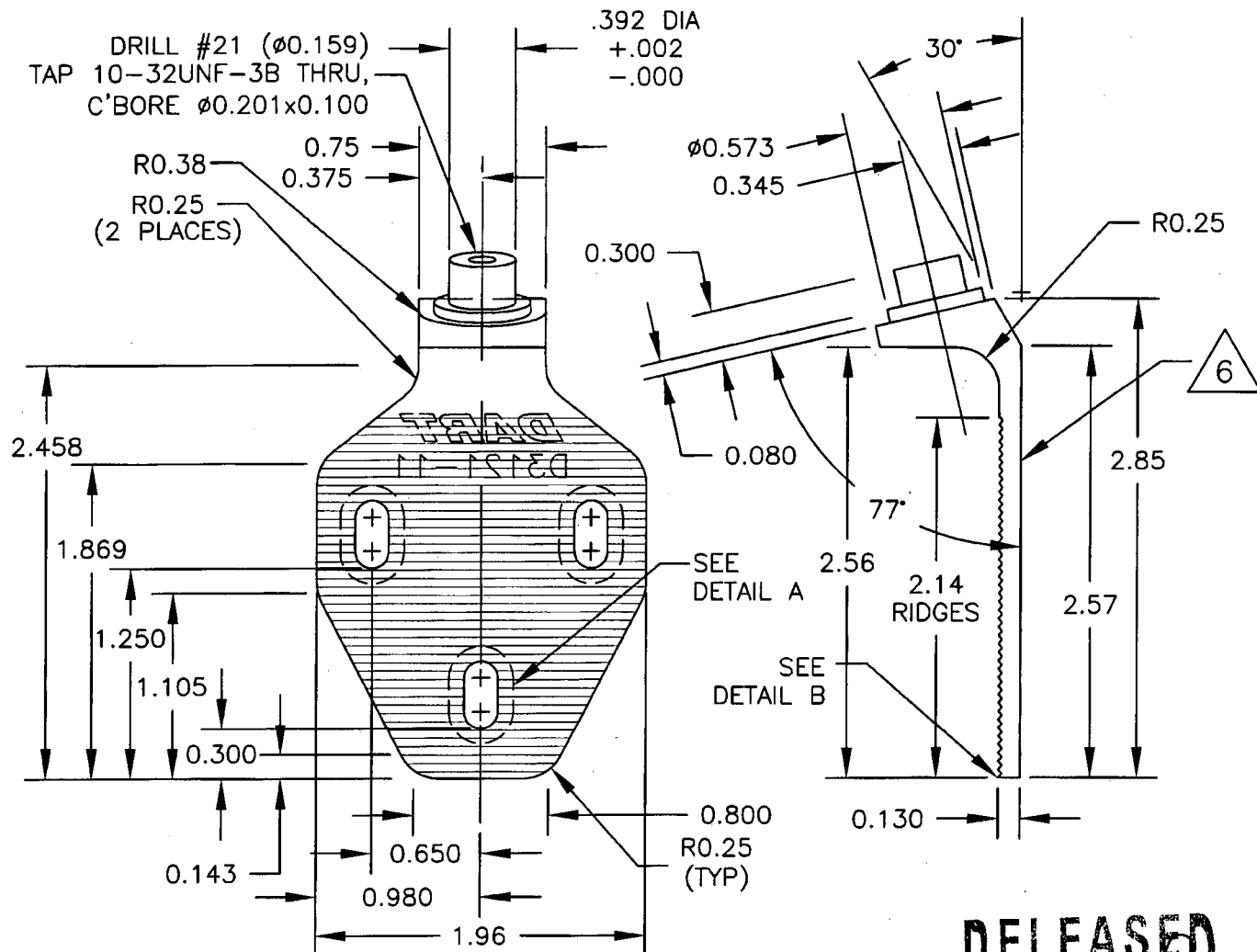
Copyright © 2002 by DART AEROSPACE LTD

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.



**DART**

|                  |                |   |                         |
|------------------|----------------|---|-------------------------|
| DESIGN<br>#      | DRAWN BY<br>LE | DART AEROSPACE LTD<br>HAWKESBURY, ONTARIO, CANADA |                         |
| CHECKED<br>#     | APPROVED<br>#  | DRAWING NO.<br>D3121                              | REV. E<br>SHEET 4 OF 10 |
| DATE<br>07.11.07 |                | TITLE<br>BRACKET ASSEMBLY                         | SCALE<br>1:1            |

**RELEASED**  
07.11.07**D3121-11 BRACKET**

- 1) MATERIAL: 17-4 SS PER AMS 5604/5643 (REF DART SPEC. M17-4-B)  
MIN ULTIMATE TENSILE = 150 ksi  
MIN YIELD TENSILE = 100 ksi
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 5) ENGRAVE DART P/N & LOGO AS SHOWN
- 6) HOLE IN SPIGOT TO BE CONCENTRIC WITHIN 0.005

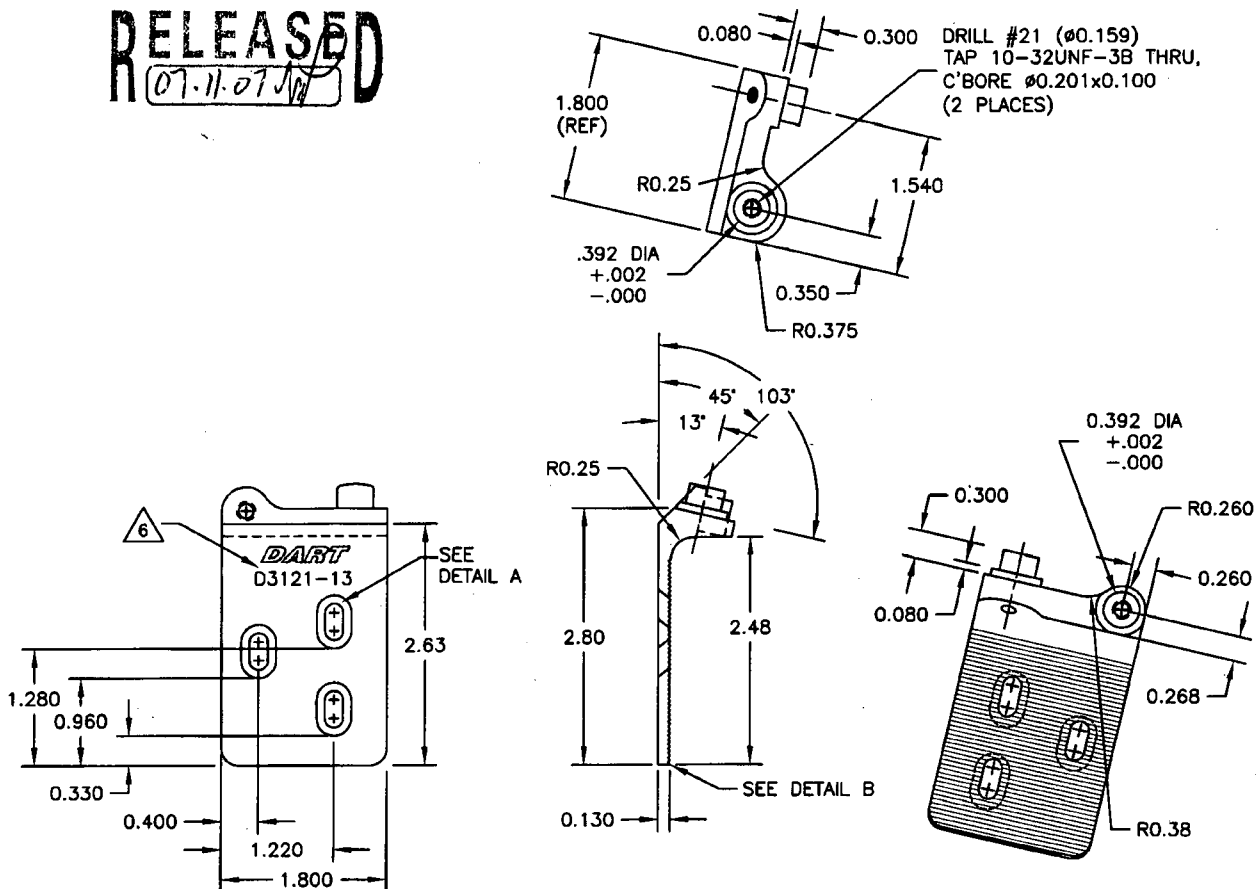
SHOP COPY  
RETURN TO  
ENGINEERING  
UNCONTROLLED COPY  
SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
WORK ORDER  
NO. 39921

**Copyright © 2004 by DART AEROSPACE LTD**

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.

**DART**

|                  |                |   |                         |
|------------------|----------------|---|-------------------------|
| DESIGN<br>#      | DRAWN BY<br>LE | DART AEROSPACE LTD<br>HAWKESBURY, ONTARIO, CANADA |                         |
| CHECKED<br>#     | APPROVED<br>#  | DRAWING NO.<br>D3121                              | REV. E<br>SHEET 5 OF 10 |
| DATE<br>07.11.07 |                | TITLE<br>BRACKET ASSEMBLY                         | SCALE<br>1:2            |

**RELEASED**  
07.11.07

**D3121-13 BRACKET (SHOWN)**  
**D3121-14 BRACKET (OPPOSITE)**

- 1) MATERIAL: 17-4 SS PER AMS 5604/5643 (REF DART SPEC. M17-4-B)  
MIN ULTIMATE TENSILE STRENGTH = 150 ksi  
MIN YIELD TENSILE STRENGTH = 100 ksi
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 5) ENGRAVE DART P/N & LOGO AS SHOWN
- 6) HOLE IN SPIGOT TO BE CONCENTRIC WITHIN 0.005

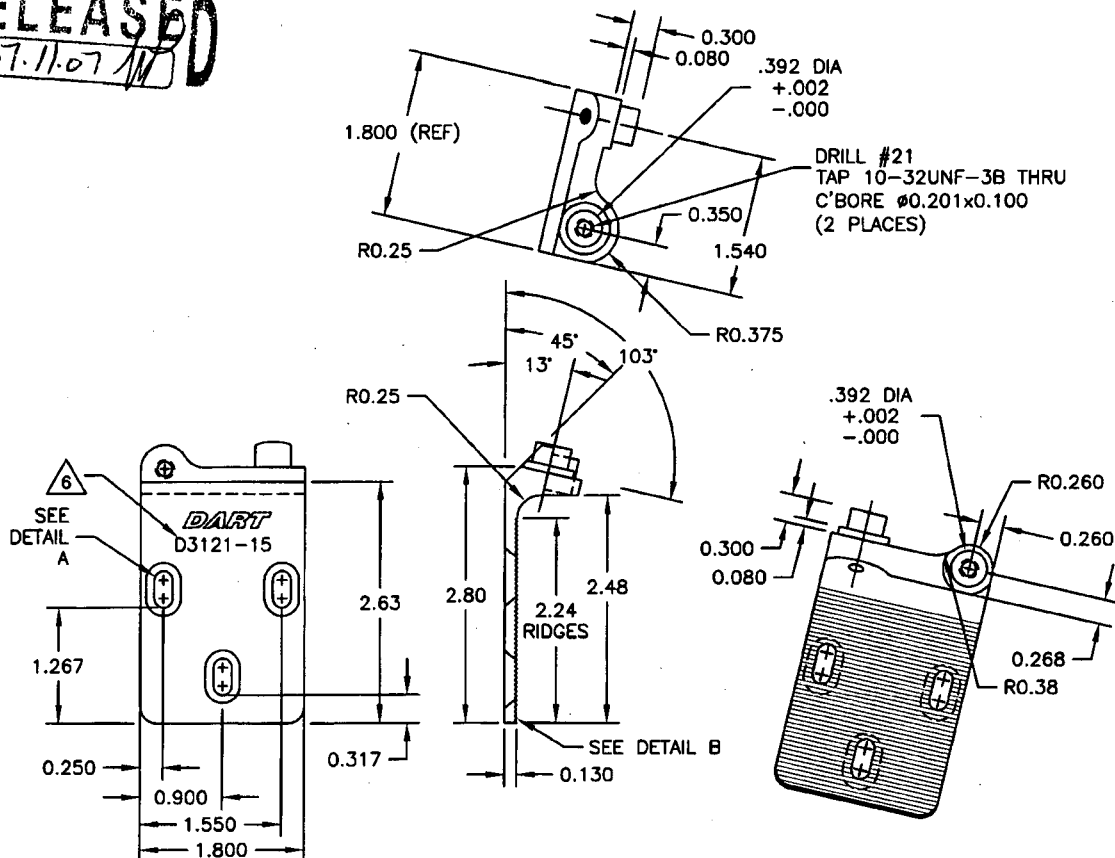
SHOP COPY  
RETURN TO  
ENGINEERING  
UNCONTROLLED COPY  
SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
WORK ORDER  
NO. 39921

Copyright © 2002 by DART AEROSPACE LTD

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.

**DART**

|                  |                |   |                         |
|------------------|----------------|---|-------------------------|
| DESIGN<br>#      | DRAWN BY<br>LE | DART AEROSPACE LTD<br>HAWKESBURY, ONTARIO, CANADA |                         |
| CHECKED<br>#     | APPROVED<br>#  | DRAWING NO.<br>D3121                              | REV. E<br>SHEET 6 OF 10 |
| DATE<br>07.11.07 |                | TITLE<br>BRACKET ASSEMBLY                         | SCALE<br>1:2            |

**RELEASED**  
07.11.07**D3121-15 BRACKET (SHOWN)****D3121-16 BRACKET (OPPOSITE)**

- 1) MATERIAL: 17-4 SS PER AMS 5604/5643 (REF DART SPEC. M17-4-B)  
MIN ULTIMATE TENSILE = 150 ksi  
MIN YIELD TENSILE = 100 ksi
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 5) ENGRAVE DART P/N AND LOGO AS SHOWN
- 6) HOLE IN SPIGOT TO BE CONCENTRIC WITHIN 0.005

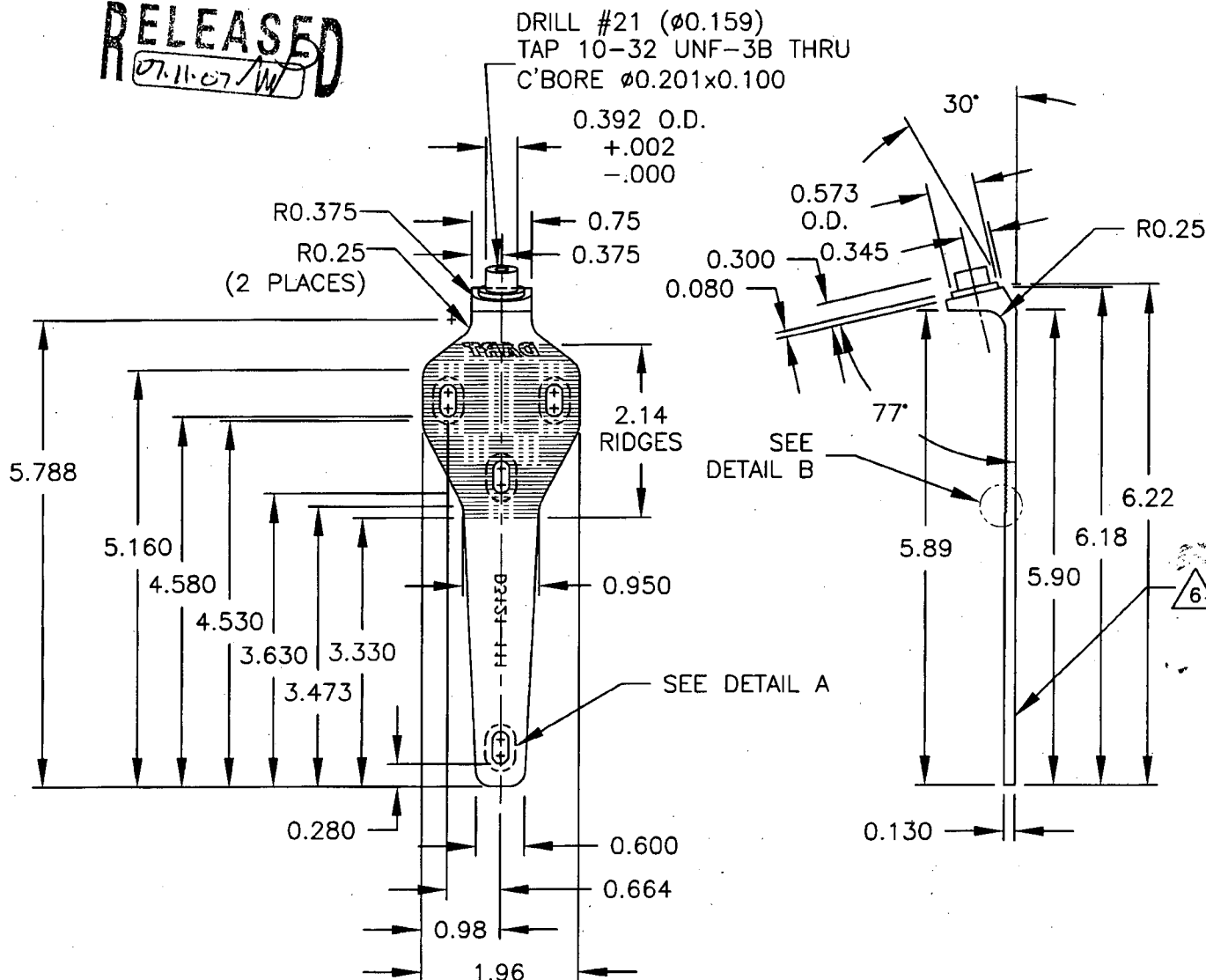
SHOP COPY  
RETURN TO  
ENGINEERING  
UNCONTROLLED COPY  
SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
WORK ORDER  
NO. 39921

**Copyright © 2002 by DART AEROSPACE LTD**

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.

**DART**

|                  |                           |   |                         |
|------------------|---------------------------|---|-------------------------|
| DESIGN<br>#      | DRAWN BY<br>LE            | DART AEROSPACE LTD<br>HAWKESBURY, ONTARIO, CANADA |                         |
| CHECKED<br>#     | APPROVED<br>#             | DRAWING NO.<br>D3121                              | REV. E<br>SHEET 7 OF 10 |
| DATE<br>07.11.07 | TITLE<br>BRACKET ASSEMBLY |   | SCALE<br>1:2            |





**RELEASED**  
07.11.07/W**D3121-111 BRACKET**

- 1) REPLACES PREMIER P/N B32-23001-11
- 2) MATERIAL: 17-4 SS PER AMS 5604/5643 (REF DART SPEC. M17-4-B)  
MIN ULTIMATE TENSILE = 150 ksi  
MIN YIELD TENSILE = 100 ksi
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 6) ENGRAVE DART P/N & LOGO IN AREAS SHOWN
- 7) HOLE IN SPIGOT TO BE CONCENTRIC WITHIN 0.005

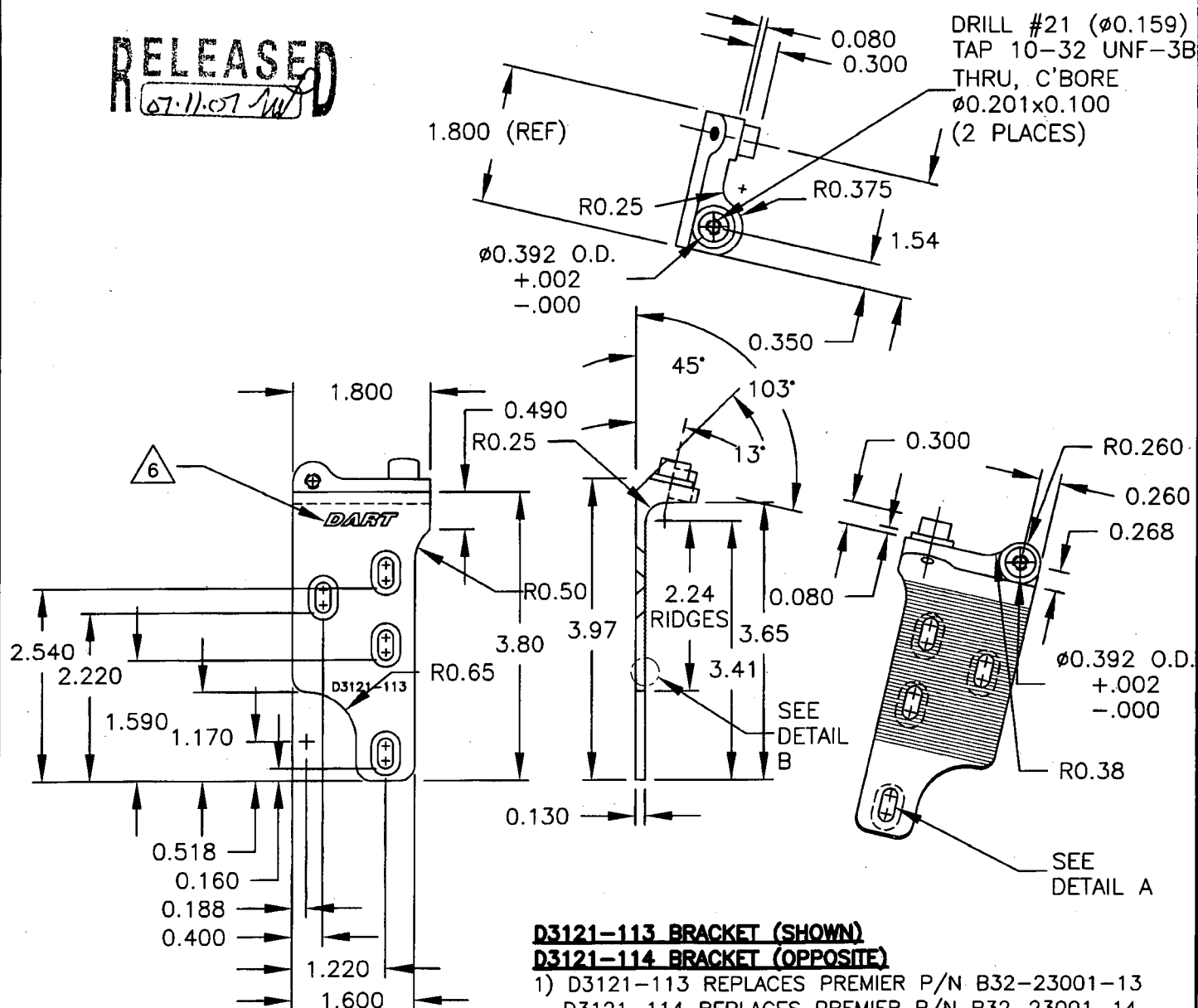
SHOP COPY  
RETURN TO  
ENGINEERING  
UNCONTROLLED COPY  
SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
WORK ORDER  
NO. 39921

**Copyright © 2002 by DART AEROSPACE LTD**

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.

|  |   |   |                         |
|--|---|---|-------------------------|
| DESIGN<br>  | DRAWN BY<br> | DART AEROSPACE LTD<br>HAWKESBURY, ONTARIO, CANADA |                         |
| CHECKED<br> | APPROVED<br> | DRAWING NO.<br>D3121                              | REV. E<br>SHEET 8 OF 10 |
| DATE<br>07.11.07   |   | TITLE<br>BRACKET ASSEMBLY                         | SCALE<br>1:2            |

RELEASED  
07.11.07



**D3121-113 BRACKET (SHOWN)**  
**D3121-114 BRACKET (OPPOSITE)**

- 1) D3121-113 REPLACES PREMIER P/N B32-23001-13  
D3121-114 REPLACES PREMIER P/N B32-23001-14  
2) MATERIAL: 17-4 SS PER AMS 5604/5643

(REF DART SPEC. M17-4-B)

MIN ULTIMATE TENSILE STRENGTH = 150 ksi

MIN YIELD TENSILE STRENGTH = 100KSI

- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

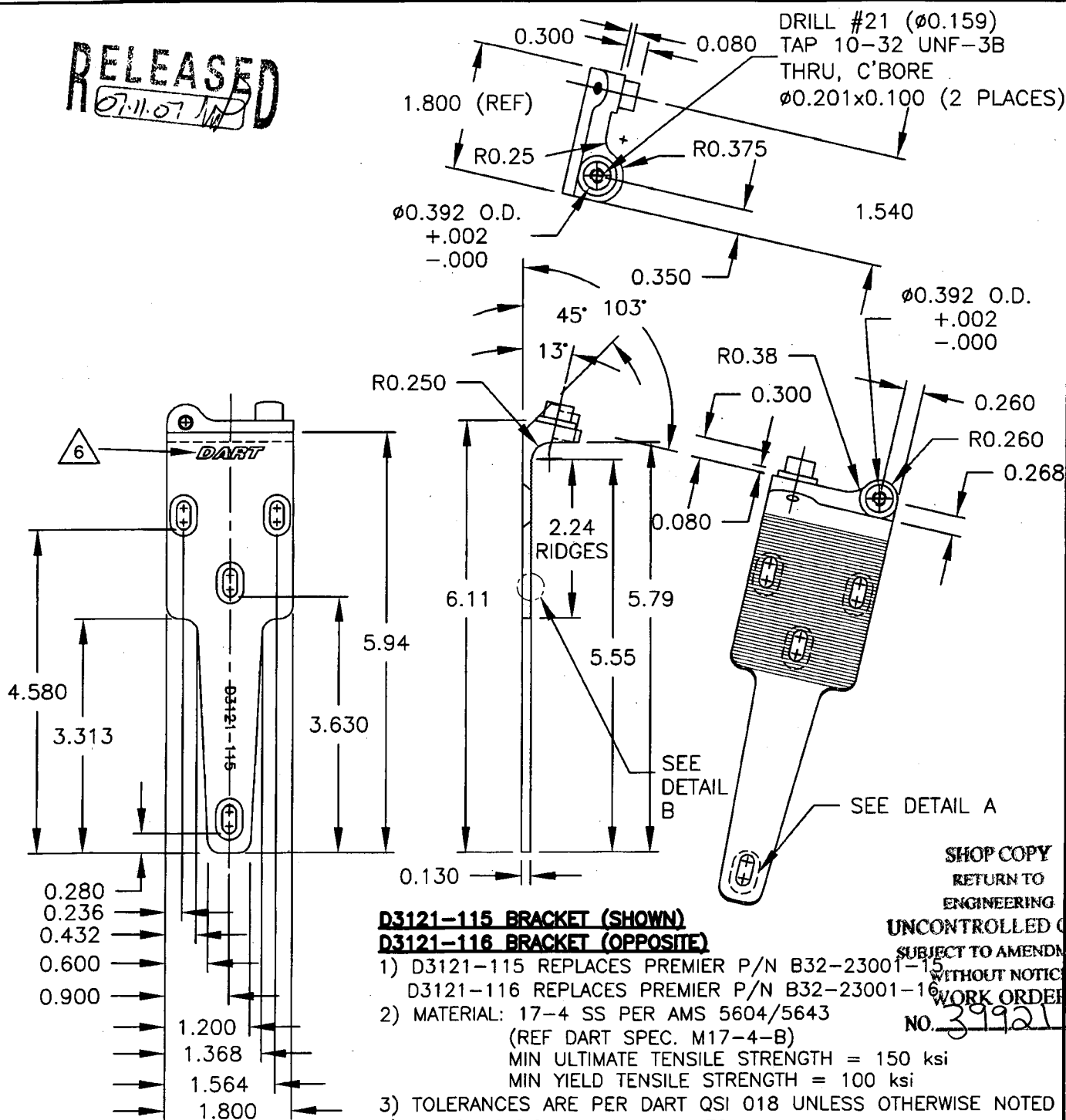
- 4) ALL DIMENSIONS ARE IN INCHES  
5) BREAK ALL SHARP EDGES 0.005 TO 0.015  
6) ENGRAVE DART P/N & LOGO IN AREAS SHOWN  
7) HOLE IN SPIGOT TO BE CONCENTRIC WITHIN 0.005

**Copyright © 2002 by DART AEROSPACE LTD**

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.

**DART**

|                  |                |   |                         |
|------------------|----------------|---|-------------------------|
| DESIGN<br>#      | DRAWN BY<br>LE | DART AEROSPACE LTD<br>HAWKESBURY, ONTARIO, CANADA |                         |
| CHECKED<br>#     | APPROVED<br>#  | DRAWING NO.<br>D3121                              | REV. E<br>SHEET 9 OF 10 |
| DATE<br>07.11.07 |                | TITLE<br>BRACKET ASSEMBLY                         | SCALE<br>1:2            |

**RELEASED**  
07.11.07

**D3121-115 BRACKET (SHOWN)**  
**D3121-116 BRACKET (OPPOSITE)**

- 1) D3121-115 REPLACES PREMIER P/N B32-23001-15  
D3121-116 REPLACES PREMIER P/N B32-23001-16
- 2) MATERIAL: 17-4 SS PER AMS 5604/5643  
(REF DART SPEC. M17-4-B)  
MIN ULTIMATE TENSILE STRENGTH = 150 ksi  
MIN YIELD TENSILE STRENGTH = 100 ksi
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 6) ENGRAVE DART P/N & LOGO IN AREAS SHOWN
- 7) HOLE IN SPIGOT TO BE CONCENTRIC WITHIN 0.005

SHOP COPY  
RETURN TO  
ENGINEERING

UNCONTROLLED COPY

SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
WORK ORDER

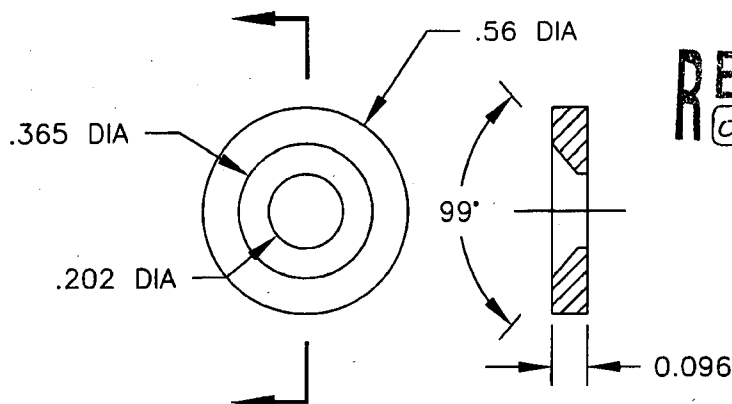
NO. 39921

Copyright © 2002 by DART AEROSPACE LTD

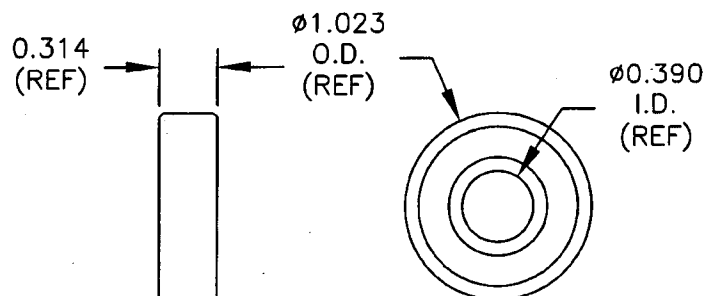
THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.

**DART**

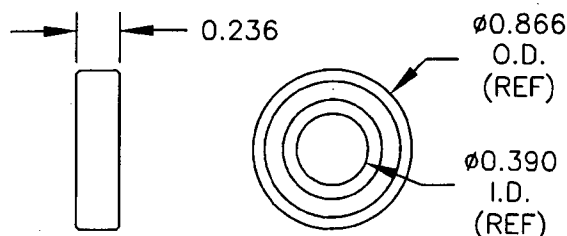
|                  |                           |   |                          |
|------------------|---------------------------|---|--------------------------|
| DESIGN<br>#      | DRAWN BY<br>LE            | DART AEROSPACE LTD<br>HAWKESBURY, ONTARIO, CANADA |                          |
| CHECKED<br>#     | APPROVED<br>#             | DRAWING NO.<br>D3121                              | REV. E<br>SHEET 10 OF 10 |
| DATE<br>07.11.07 | TITLE<br>BRACKET ASSEMBLY |   | SCALE<br>1:1             |

**D3121-17 WASHER (SCALE 2:1)**

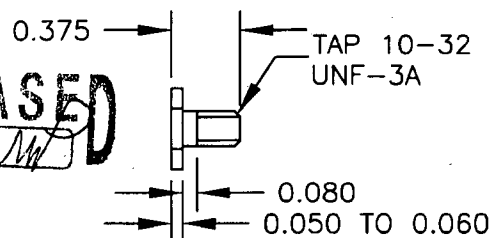
- 1) REPLACES PREMIER P/N B32-23001-17
- 2) MATERIAL: AISI 303 SS ROUND BAR, ANNEALED (REF DART SPEC. M303R)
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.015

**D3121-19 BEARING (SCALE 1:1)**

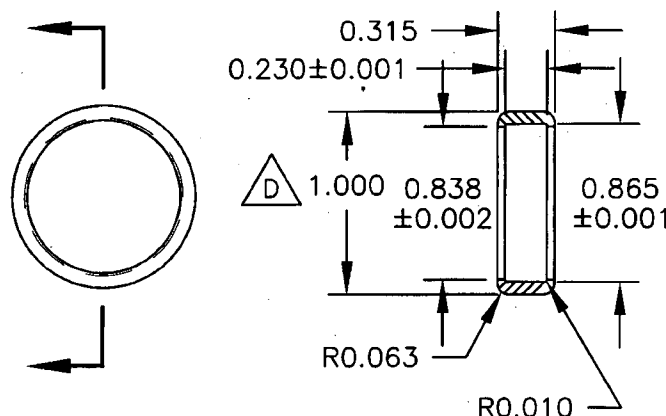
- 1) POSSIBLE SUPPLIER: KING BEARING P/N 6000-2ZJ/EM FAFNIR P/N 9100KDD
- 2) ALL DIMENSIONS ARE IN INCHES

**D3121-23 BEARING (SCALE 1:1)**

- 1) POSSIBLE SUPPLIER: SKF P/N 61900-2Z OR KML P/N 6900-ZZ
- 2) ALL DIMENSIONS ARE IN INCHES

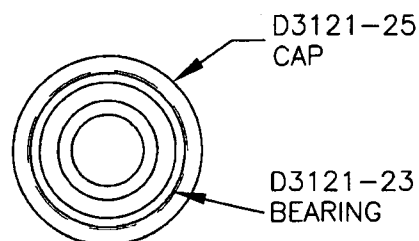
**D3121-21 BOLT (SCALE 1:1)**

- 1) MATERIAL: AISI 303 SS HEX, ANNEALED (REF DART SPEC. M303H0.500)
- 2) FINISH: NONE
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.015

**D3121-25 CAP (SCALE 1:1)**

- 1) MATERIAL: DELRIN ROD, 1.25 (REF DART SPEC. M-DELRIN-R1.250)
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES

SHOP COPY  
RETURN TO  
ENGINEERING  
UNCONTROLLED COPY  
SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
WORK ORDER  
NO. 39921

**D3121-241 BEARING ASSEMBLY (SCALE 1:1)**

Copyright © 2002 by DART AEROSPACE LTD

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.

